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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/785,048	02/15/2001	Mark J. Pettay	259/298	4717

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EXAMINER

JACKSON, JAKIEDA R

ART UNIT	PAPER NUMBER
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2655

12

DATE MAILED: 02/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/785,048

Applicant(s)

PETTAY, MARK J.

Examiner

Jakieda R Jackson

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 4, 6-8, 10, 11.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Restarting Response Time Period

1. The original office action mailed January 15, 2004 was defective. This supplemental action is replacing said first non-final action. It restarts the time period, to expire 3 months from the mailing date of this supplemental action.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-5, 6-9, 11, 13 and 15**, are rejected under 35 U.S.C. 102(e) as being anticipated by Surace et al. (U.S. Patent No. 6,144,938), hereinafter referenced as Surace.

Regarding **claim 1**, Surace discloses a voice user interface, comprising the steps of:

conducting a voice interaction between an agent (voice user interface) and a client (subscriber; column 17, lines 6-10) wherein the agent follows a script (column 19, line 60 – column 20, line 20), and

evaluating the voice interaction with an automatic speech recognition component adapted to analyze the voice interaction and determine whether the agent has adequately followed the script (column 6, lines 34-63).

The preamble "reading a script" was given no patentable weight by the examiner because the word "follows" that is in the claim, is broader than "reads" in the preamble; the examiner has interpreted the word "adequately" to mean "so as to enable the users' input to be recognized."

Regarding **claim 2**, Surace discloses the method wherein the agent is a telemarketing agent (column 4, lines 60-64).

Regarding **claim 3**, Surace discloses the method wherein the script includes an offer of services (column 4, lines 60-64).

Regarding **claim 4**, Surace discloses the method wherein said voice interaction is carried on a communications network (column 4, lines 46-53).

Regarding **claim 5**, Surace discloses the method wherein said communications network is a publicly switched telephone network (telephone line; 4, line 49).

Regarding **claim 6**, Surace discloses the method wherein said communications network is the internet (column 8, lines 51-58).

Regarding **claim 7**, Surace discloses the method wherein said communications network includes a wireless component (mobile telephone; column 16, lines 4-8).

Regarding **claim 8**, Surace discloses the method the voice interaction is a telephone call (column 7, lines 54-61).

Regarding **claim 9**, Surace discloses the method wherein said telephone call is initiated by said client (subscriber logs on; column 17, lines 10-13).

Regarding **claim 11**, Surace discloses the method further comprising the step of: performing an action based upon a determination obtained from said evaluating step (failure of ASR system; column 6, lines 34-63).

Regarding **claim 13**, Surace discloses the method wherein said performing an action step comprises transmitting a signal to a reviewing authority corresponding to said determination (column 6, lines 58-64).

Regarding **claim 15**, Surace discloses the method comprising the further step of: reviewing the determination of whether the agent has adequately followed the script (column 6, lines 34-63).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. **Claims 12, 14 and 16-27** are rejected under 35 U.S.C. 103(a) as being unpatentable over Surace in view of Rtischev et al. (U.S. Patent No. 5,634,086), hereinafter referenced as Rtischev.

Regarding **claim 18**, Surace discloses a voice user interface comprising:

a communication network (column 3, lines 48-51) to support a voice interaction between an agent (voice user interface) and a client (subscriber; column 17, lines 6-10) wherein said agent follow a script (column 19, line 60 –column 20, line 20),

an automatic speech recognition component adapted to analyze the voice interaction and determination whether the agent has adequately followed the script (column 6, lines 34-63) but lacks means for causing one or more actions to be taken based upon a determination by the automatic speech recognition component as to whether the agent has adequately followed the script. Rtischev discloses means for causing one or more actions to be taken (model searcher; figure 2, element 44) based upon a determination by the automatic speech recognition component as to whether the agent has adequately followed the script (column 5, lines 2-26), to perform a search.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's invention such that it discloses means for causing one or more actions to be taken based upon a determination by the automatic speech recognition component as to whether the agent has adequately followed the script to judge the quality of lesson performance (column 6, lines 4-5).

Regarding **claim 16**, Surace a voice user interface method but lacks the method wherein said determination of whether the agent has adequately followed the script is score assigned by the automatic speech recognition component. Rtischev discloses the method wherein said determination of whether the agent has adequately followed the script is score assigned by the automatic speech recognition component (column 5, line 46 – column 6, line 5), to judge the quality of lesson performance.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's invention such that it determines whether the agent has adequately followed the script and a score is assigned to identify good renditions of the scripted lesson (column 6, lines 1-3).

Regarding **claim 17**, Surace discloses the method wherein the voice interaction comprises a plurality of panels and a score is assigned to each panel by the automatic speech recognition component (figure 14B).

Regarding **claims 12 and 25**, Surace discloses a voice user interface method but lacks the method wherein said performing an action step comprises transmitting a signal to said agent corresponding to said determination. Rtischev discloses the method wherein said performing an action step comprises transmitting a signal (signal processing system; figure 2, element 42) to said agent corresponding to said determination (column 5, lines 2-11), to control the mother workstation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's invention such that it transmits a signal to said agent corresponding to said determination to judge the quality of lesson performance (column 6, lines 4-5).

Regarding **claims 14 and 27**, Surace discloses a voice user interface method but lacks the method wherein said performing an action step comprises causing an entry to be made in a script compliance incentive system. Rtischev discloses the method wherein said performing an action step comprises causing an entry to be made

in a script compliance incentive system (instruction and evaluation system; column 2, line 63 – column 3, line 10), for evaluation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's invention such that it causes an entry to be made in a script compliance incentive system to evaluate the performance while tolerating foreign accents and any other language fluency (column 2, lines 63-66).

Regarding **claim 19**, Surace discloses the system wherein said communication network comprises a long distance telephone network (telephone line; column 4, line 49). It is inherent to include long distance in a telephone line.

Regarding **claim 20**, Surace discloses the method wherein said communications network comprises an internet-based network (column 8, lines 51-58).

Regarding **claim 21**, Surace discloses a voice user interface method but lacks the system comprising a call center including a plurality of agent workstations. Rtischev discloses a call center including a plurality of agent workstations (column 4, line 48 – column 5, line 46), to provide an indexed set to a hidden Markov model (HMM) trainer.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's invention such that it discloses a call center including a plurality of agent workstations to build general HMM models of target language speech which employs native and non-native speakers (column 5, lines 34-41).

Regarding **claim 22**, Surace discloses the system wherein said agent workstation includes a telephone and a computer terminal (column 1, lines 32-37).

Regarding **claim 23**, Surace discloses the method wherein the agent is a telemarketing agent (column 4, lines 60-64).

Regarding **claim 24**, Surace discloses the system wherein said agent is a customer service agent (column 4, lines 60-64).

Regarding **claim 26**, Surace discloses the method wherein said one or more actions comprises transmitting a signal to a reviewing authority corresponding to said determination (column 6, lines 58-64).

6. **Claim 10** is rejected under 35 U.S.C. 103(a) as being unpatentable over Surace in view of Aviv (U.S. Patent No. 5,666,157).

Regarding **claim 10**, Surace discloses a voice user interface but lacks disclosing the method wherein said evaluating step includes the steps of:

converting said voice interaction into a digital signal comprising a spectral representation of said voice interaction, comparing said digital signal to a reference standard comprising a known vocabulary, and matching said digital signal to words and phrases contained in said reference standard. Aviv discloses that steps that includes:

disclosing the method wherein said evaluating step includes the steps of:

converting (processing) said voice interaction into a digital signal comprising a spectral representation of said voice interaction (column 10, line 64 – column 11, line 22),

comparing (figure 4, element 46) said digital signal to a reference standard comprising a known vocabulary (column 10, line 64 – column 11, line 22), and

matching (figure 4, element 46) said digital signal to words and phrases contained in said reference standard (column 10, line 64 – column 11, line 22), in to have the best representation of the word.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Surace's invention such that it converts said voice interaction into a digital signal comprising a spectral representation of said voice interaction, compares said digital signal to a reference standard comprising a known vocabulary, and matches said digital signal to words and phrases contained in said reference standard to help recognize the different sounds, voices, accents etc. of each word for clarification.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- U.S. Patent No. 6,370,508 to Beck et al discloses an interface engine for managing business processes within a multimedia communication-center.
- U.S. Patent No.6,401,066 to McIntosh discloses an automated third party verification system.
- U.S. Patent No. 6,058,303 to Astrom et al. discloses a system and method for subscriber activity supervision.
- U.S. Patent No. 6,501,956 to Weeren et al. provides blended interface for wireless information services.

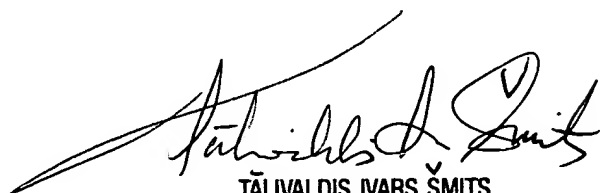
- U.S. Patent No. 6,604,075 to Brown et al. discloses a web-based voice dialog interface.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jakieda R Jackson whose telephone number is 703.305.5593. The examiner can normally be reached on Monday through Friday from 7:30 a.m. to 5:00p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talivaldis I. Smits can be reached on 703. 306-3011. The fax phone number for the organization where this application or proceeding is assigned is 703.872.9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.305.4700.

JRJ
February 5, 2004



TĀLIVALDIS IVARS ŠMITS
PRIMARY EXAMINER